Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of claims:

1. (Currently Amended) A termination resistor comprising:

a first transistor, a second transistor, and a third transistor, all three transistors being either positive-channel metal-oxide semiconductor transistors or negative-channel metal-oxide semiconductor transistors, each transistor having a gate terminal, a first terminal, and a second terminal; and

~~a second transistor having a gate coupled to a gate of said first transistor, and having a drain coupled to a drain of said first transistor;~~

~~a third transistor having a drain coupled to a source of said second transistor; and~~

a first resistor having first and second terminals, the first terminal of the first resistor being directly connected to the gate terminal and the first terminal of the third transistor, the gate terminal and the first terminal of the third transistor being directly connected together, and the second terminal of the first resistor being directly connected to the first terminal of the first transistor ~~coupled between a source of said first transistor, and a gate and source of said third transistor~~

wherein the first terminal of the second transistor is directly connected to the second terminal of the third transistor,

the second terminal of the first transistor is directly connected to the second terminal of the second transistor, and

the gate terminal of the first transistor is directly connected to the gate terminal of the second transistor.

2. (Canceled).

3. (Currently Amended) The termination resistor of claim [[2]] 1, wherein said three ~~metal-oxide-semiconductor~~ transistors comprise positive-channel metal-oxide semiconductor transistors.

4. (Currently Amended) The termination resistor of claim [[2]] 1, wherein said three ~~metal-oxide-semiconductor~~ transistors comprise negative-channel metal-oxide semiconductor transistors.

5. (Original) The termination resistor of claim 1, wherein said first resistor comprises a poly resistor.

6. (Original) The termination resistor of claim 1, wherein said first resistor comprises a positive-channel metal-oxide semiconductor transistor.

7. (Currently Amended) The termination resistor of claim 1, further comprising a differential amplifier having an output ~~coupled~~ directly connected to the gate terminal of said first transistor and the gate terminal of said second transistor, and having a first input ~~coupled~~ directly connected to the first terminal of the first resistor and the ~~source~~ first terminal and gate terminal of said third transistor.

8. (Currently Amended) The termination resistor of claim 7, further comprising a ground ~~lead~~ terminal to be coupled to ground and a second resistor having first and second terminals, ~~coupled~~ a first terminal of the second resistor directly connected to the ground terminal and the second terminal of the second resistor directly connected the first input of the differential amplifier, the first terminal of the first resistor, and the first terminal and gate terminal of said third transistor ~~between the first input of said differential amplifier and the ground lead~~.

9. (Cancelled).

10. (Withdrawn) The termination resistor of claim 1 arranged in a semiconductor device, the semiconductor device further comprising a semiconductor die.

11-17. (Cancelled).

18. (Withdrawn--Currently Amended) The termination resistor of claim 1, integrated on a semiconductor die having power and pad terminals, wherein:

the ~~drain~~ second terminal of the first transistor and the ~~drain~~ second terminal of the second transistor are coupled to the power terminal of the semiconductor die; and

the first terminal of the first resistor and the gate terminal and ~~source~~ first terminal of the third transistor are coupled to the pad terminal of the semiconductor die.

19-25. (Cancelled).

26. (Previously Presented) The termination resistor of claim 1, wherein a resistance of said first resistor is to prevent the first transistor from entering into saturation.

27. (Currently Amended) The termination resistor of claim 1, further comprising a bias ~~lead~~ terminal to be coupled to a bias voltage, a power ~~lead~~ terminal to be coupled to a power supply voltage, and an output ~~lead~~ terminal to provide output from the termination resistor, wherein:

the gate terminal of the first transistor and the gate terminal of the second transistor are coupled to the bias ~~lead~~ terminal;

the ~~drain~~ second terminal of the first transistor and the ~~drain~~ second terminal of the second transistor are coupled to the power lead, and

the first terminal of the first resistor and the gate terminal and ~~source~~ first terminal of the third transistor are coupled to the output lead.

28. (Previously Presented) The termination resistor of claim 27, wherein, if measured via the output lead, the termination resistor has a linear voltage-current characteristic for output voltages at the output lead below a threshold voltage V_t of the first transistor.

29. (Currently Amended) ~~The~~ A termination resistor ~~of claim 1,~~ comprising:

a first transistor;

a second transistor having a gate coupled to a gate of said first transistor, and having a drain coupled to a drain of said first transistor;

a third transistor having a drain coupled to a source of said second transistor; and

a first resistor coupled ~~to~~ between a source of said first transistor, and a gate and source of said third transistor,

wherein a resistance of said first resistor is about 50% of a total resistance of the termination resistor.

30. (Currently Amended) The termination resistor of claim 6, further comprising a power ~~lead~~ terminal to be coupled to a power supply voltage and a ground ~~lead~~ terminal to be coupled to ground, wherein the ~~drain~~ second terminal of the first transistor and the ~~drain~~ second terminal of the second transistor are coupled to the power ~~lead~~ terminal, and a gate terminal of the positive-channel metal-oxide semiconductor transistor arranged as the first resistor is coupled to the ground ~~lead~~ terminal.

31. (Currently Amended) The termination resistor of claim 7, further comprising an output ~~lead~~ terminal to provide output from the termination resistor, said output of the differential amplifier being coupled to the output ~~lead~~ terminal.

32. (Currently Amended) The termination resistor of claim 8, further comprising an output ~~lead~~ terminal to provide output from the termination resistor, said output of the differential amplifier being coupled to the output ~~lead~~ terminal.

33. (Previously Presented) The termination resistor of claim 32, wherein a total resistance of the termination resistor R_{ODT} satisfies:

$$(1-1/A)/(1+1/A) < R_{ODT}/R_{ref} < (1+1/A)/(1-1/A)$$

where R_{ref} is a resistance of said second resistor and "A" is a gain of the differential amplifier.

34. (Previously Presented) The termination resistor of claim 33, wherein a resistance of said first resistor is about 50% of the total resistance of the termination resistor.

35. (Currently Amended) The termination resistor of claim 33, further comprising a power ~~lead~~ terminal to be coupled to a power supply voltage ~~Vcc~~, wherein the ~~drain~~ second terminal of the first transistor and the ~~drain~~ second terminal of the second transistor are coupled to the power

~~lead~~ terminal, and wherein a second input of said differential amplifier is arranged to receive ½ ~~Vcc~~ of the power supply voltage.

36. (New) The termination resistor of claim 1, wherein a width/length channel ratio of the second transistor is larger than a width/length channel ratio of the third transistor.

37. (New) The termination resistor of claim 36, wherein a width/length channel ratio of the second transistor is larger than a width/length channel ratio first transistor, and the width/length channel ratio of the first transistor is larger than a width/length channel ratio of the third transistor.

38. (New) The termination resistor of claim 1, wherein a resistance of said first resistor is about 50% of a total resistance of the termination resistor.